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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,643	01/09/2002	Moshe Czeiger	3891-0103P	3010

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EXAMINER

NGUYEN, THANH T

ART UNIT PAPER NUMBER

2144

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/040,643

Applicant(s)

CZEIGER ET AL.

Examiner

Tammy T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/18/03, 4/17/03</u> .  | 6) <input type="checkbox"/> Other: _____                                    |



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## Detailed Office Action

1. This action is in response to the application 10/040643 filed. **January 9, 2002**
2. Claims 1-20 have been examined.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kanekar et al., (hereinafter Kanekar) U.S. Patent No. 6,751,191 in view of Wang et al., (hereinafter Wang) U.S. Patent No. 6,834,3.
5. As to claim 1, Kanekar teaches the invention as claimed, including a method for transferring information between a first network comprising first-network-stations operating under an Ethernet protocol and a second network comprising second-network-stations operating under a Fibre Channel (FC) protocol, comprising: grouping the first-network-stations into one or more virtual local area networks (VLANs), each of the VLANs comprising one or more of the first-network-stations which transfer a respective VLAN-data-frame within the VLAN (VLAN 1 724 of fig.1) (see col.9, lines 1-10); grouping the second-network-stations into one or more zones, each of the zones comprising one or more of the second-network-stations which transfer a respective zone-data-frame within the zone (VLAN2 728 of fig.7) (see col.9, lines 10-23); coupling the first and the second networks together using a gateway to convey data between the networks (default gateway 1404 of fig.14)(see col.9, lines 47-65, and col.15, line 67 to col.16, line 37); configuring the gateway with a primary association mapping a primary VLAN chosen from the VLANs and a primary zone chosen from the zones, the primary

VLAN transferring a primary VLAN-data-frame comprising primary-data, comprised in the data, therein, and the primary zone transferring a primary zone-data-frame comprising the primary-data therein (configure router R1 master and slave of fig.14a) (see col.15, line 67 to col.16, line 20); and translating in the gateway between the primary VLAN-data-frame and the primary zone-data-frame, responsive to the primary association, so as to convey the primary-data between the primary VLAN and the primary zone via the gateway (fig.14B) (see col.16, lines 21-57). But Kanekar does not explicitly teach a Fibre channel protocol. However, Wang discloses a Fibre channel protocol (see col.2, lines 53-61, col.3, lines 45-56, and col.34, lines 15-45, and col.35, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Wang into the computer system of Kanekar to have a Fibre channel protocol because it would have an efficient system that can provided to support full-duplex data transfer rates.

6. As to claim 2, Kanekar teaches the invention as claimed, wherein configuring the gateway with the primary association comprises storing the primary association in a memory comprised in the gateway, the memory comprising a content addressable memory which uses the primary association to perform the translation (Switch 1402 of fig.14A) (see col.16, lines 1-57).
7. As to claim 3, Kanekar teaches the invention as claimed, wherein translating in the gateway between the primary VLAN-data-frame and the primary zone-data-frame

comprises transferring the primary-data transparently between the primary VLAN and the primary zone so that the primary VLAN and the primary zone are not aware of translations performed in the gateway (Switch 1402 of fig.14A) (see col.16, lines 1-57).

8. As to claim 4, Kanekar teaches the invention as claimed, wherein comprising:  
configuring the gateway with a secondary association mapping a secondary VLAN chosen from the VLANs and a secondary zone chosen from the zones, the secondary VLAN transferring a secondary VLAN-data-frame comprising secondary-data, comprised in the data, therein, and the secondary zone transferring a secondary zone-data-frame comprising the secondary-data therein; and translating in the gateway between the secondary VLAN-data-frame and the secondary zone-data-frame, responsive to the secondary association, so as to convey the secondary-data between the secondary VLAN and the secondary zone via the gateway (VLAN2 connect to router R2 Slave of fig.14A)(see col.15, line 67 to col.16, lines 47).
9. As to claim 5, Kanekar teaches the invention as claimed, wherein comprising restricting the secondary VLAN and the secondary zone from accessing the primary-data (VLAN1 connect to router R1 master of fig.14A) (see col.15, line 67 to col.16, lines 47).
10. As to claim 6, Kanekar teaches the invention as claimed, wherein comprising: providing a joint second-network-station, chosen from the second-network-stations, implemented to be in the primary zone and the secondary zone; conveying the primary-data between the

joint second-network-station and the primary VLAN, responsive to the primary association, and conveying the secondary-data between the joint second-network-station and the secondary VLAN, responsive to the secondary association (fig.8) (see col.9, line 49 to col. 10, line 11, and col.16, lines 1-57).

11. As to claim 7, Kanekar teaches the invention as claimed, wherein comprising: providing a joint first-network-station, chosen from the first-network-stations, implemented to be in the primary VLAN and the secondary VLAN; conveying the primary-data between the joint first-network-station and the primary zone, responsive to the primary association; and conveying the secondary-data between the joint first-network-station and the secondary zone, responsive to the secondary association (VLAN1 and VLAN2 of fig. 8).
12. As to claim 8, Kanekar teaches the invention as claimed, wherein configuring the gateway comprises allocating a virtual port of the gateway to the primary association, and wherein translating in the gateway comprises operating the gateway as a virtual switch so as to check a connection between the virtual port and a destination first-network-station comprised in the primary VLAN (Virtual switch 1402 of fig.14A) (see col.15, line 67 to col.16, line 15).
13. As to claim 9, Kanekar teaches the invention as claimed, wherein translating in the gateway comprises translating an identity of the primary VLAN in the primary VLAN-

data-frame to a virtual source identity in the primary zone-data-frame, for data conveyed from the first network to the second network (Packet flow from H1 to H2 of fig.14A).

14. As to claim 10, Kanekar teaches the invention as claimed, wherein translating in the gateway comprises translating a virtual destination identity comprised in the primary zone-data-frame to an identity of the primary VLAN in the primary VLAN-data-frame, for data conveyed from the second network to the first network (first network 810 and second network 804) (see col.9, lines 24-53).
15. As to claim 11, Kanekar teaches the invention as claimed, including a apparatus for transferring information between a first network operating under an Ethernet protocol and comprising first-network-stations grouped into one or more VLANs, each VLAN comprising one or more of the first-network-stations which transfer a respective VLAN-data-frame within the VLAN (VLAN 1 724 of fig.1) (see col.9, lines 1-10), and a second network operating and comprising one or more second-network-stations grouped into one or more zones, each zone comprising one or more of the second-network-stations which transfer a respective zone-data-frame within the zone (VLAN2 728 of fig.7) (see col.9, lines 10-23), the apparatus comprising: a gateway which is adapted to couple the first and the second network and to map a primary association between a primary VLAN chosen from the VLANs and a primary zone chosen from the zones, the primary VLAN transferring a primary VLAN-data-frame comprising primary-data therein (configure router R1 master and slave of fig.14a) (see col.15, line 67 to col.16, line 20), and the



primary zone transferring a primary zone-data-frame comprising the primary-data therein, and to translate between the primary VLAN-data-frame and the primary zone-data-frame, responsive to the primary association, so as to convey the primary-data between the primary VLAN and the primary zone (fig.14B) (see col.16, lines 21-57). But Kanekar does not explicitly teach a Fibre channel protocol. However, Wang discloses a Fibre channel protocol (see col.2, lines 53-61, col.3, lines 45-56, and col.34, lines 15-45, and col.35, lines 15-20). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Wang into the computer system of Kanekar to have a Fibre channel protocol because it would have an efficient system that can provided to support full-duplex data transfer rates.

16. As to claim 12, Kanekar teaches the invention as claimed, wherein the gateway comprises a content addressable memory wherein the primary association is stored and which is adapted to perform the translation (Switch 1402 of fig.14A) (see col.16, lines 1-57).
17. As to claim 13, Kanekar teaches the invention as claimed, wherein translating in the gateway between the primary VLAN-data-frame and the primary zone-data-frame comprises transferring the primary-data transparently between the primary VLAN and the primary zone so that the primary VLAN and the primary zone are not aware of translations performed in the gateway (Switch 1402 of fig.14A) (see col.16, lines 1-57).

18. As to claim 14, Kanekar teaches the invention as claimed, wherein the gateway is adapted to map a secondary association between a secondary VLAN chosen from the VLANs and a secondary zone chosen from the zones, the secondary VLAN transferring a secondary VLAN-data-frame comprising secondary-data therein, and the secondary zone transferring a secondary zone-data-frame comprising the secondary-data therein, and to translate between the secondary VLAN-data-frame and the secondary zone-data-frame, responsive to the secondary association, so as to convey the secondary-data between the secondary VLAN and the secondary zone (VLAN2 connect to router R2 Slave of fig.14A)(see col.15, line 67 to col.16, lines 47).

19. As to claim 15, Kanekar teaches the invention as claimed, wherein the gateway is adapted to restrict the secondary VLAN and the secondary zone from accessing the primary-data (VLAN1 connect to router R1 master of fig.14A) (see col.15, line 67 to col.16, lines 47).

20. As to claim 16, Kanekar teaches the invention as claimed, wherein comprising a joint second-network-station, chosen from the second-network-stations, implemented to be in the primary zone and the secondary zone, so that the primary-data is conveyed between the joint second-network-station and the primary VLAN responsive to the primary association, and the secondary-data is conveyed between the joint second-network-station and the secondary VLAN responsive to the secondary association (fig.8) (see col.9, line 49 to col. 10, line 11, and col.16, lines 1-57).

21. As to claim 17, Kanekar teaches the invention as claimed, wherein comprising a joint first-network-station, chosen from the first-network-stations, implemented to be in the primary VLAN and the secondary VLAN, so that the primary-data is conveyed between the joint first-network-station and the primary zone responsive to the primary association, and the secondary-data is conveyed between the joint first-network-station and the secondary zone responsive to the secondary association (VLAN1 and VLAN2 of fig. 8).
22. As to claim 18, Kanekar teaches the invention as claimed, wherein the gateway comprises a virtual port allocated to the primary association, and wherein the gateway is adapted to operate as a virtual switch so as to check a connection between the virtual port and a destination first-network-station comprised in the primary VLAN (Virtual switch 1402 of fig.14A) (see col.15, line 67 to col.16, line 15).
23. As to claim 19, Kanekar teaches the invention as claimed, wherein the gateway is adapted to translate an identity of the primary VLAN in the primary VLAN-data-frame to a virtual source identity in the primary zone-data-frame, for data conveyed from the first network to the second network (Packet flow from H1 to H2 of fig.14A).
24. As to claim 20, Kanekar teaches the invention as claimed, wherein the gateway is adapted to translate a virtual destination identity comprised in the primary zone-data-frame to an identity of the primary VLAN in the primary VLAN-data-frame, for data conveyed from

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the second network to the first network (first network 810 and second network 804) (see col.9, lines 24-53).

### *Conclusion*

25. Any inquiries concerning this communication or earlier communications from the examiner should be directed to **Tammy T. Nguyen** who may be reached via telephone at (571) 272-3929. The examiner can normally be reached Monday through Friday between 8:00 a.m. and 5:00 p.m. eastern standard time.

If you need to send the Examiner, a facsimile transmission regarding this instant application, please send it to (703) 872-9306. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Bill Cuchlinski, may be reached at (571) 272-3925.

*TTN*

February 4, 2005



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